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PHOTOGRAPHIC INTERPRETATION REPORT

**IRBM/MRBM LAUNCH AREAS
IN THE
EUROPEAN USSR
IDENTIFIED ON MISSION 9019**

NPIC/R-5/61

September 1961

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

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PREFACE

This photographic interpretation report has been prepared by the Army, Navy, Air Force, and Central Intelligence Agency in answer to CIA and Air Force requirements for analysis of missile facilities identified in the USSR from photography of [REDACTED]. The CIA requirement (DDI/RR/E/R-27/61) requests an analysis of IRBM/MRBM launch areas and associated facilities. The Air Force requirements (AFIC-10/61, AFIC-11/61, and AFIC-14/61) request an analysis of SSM launch and support facilities.

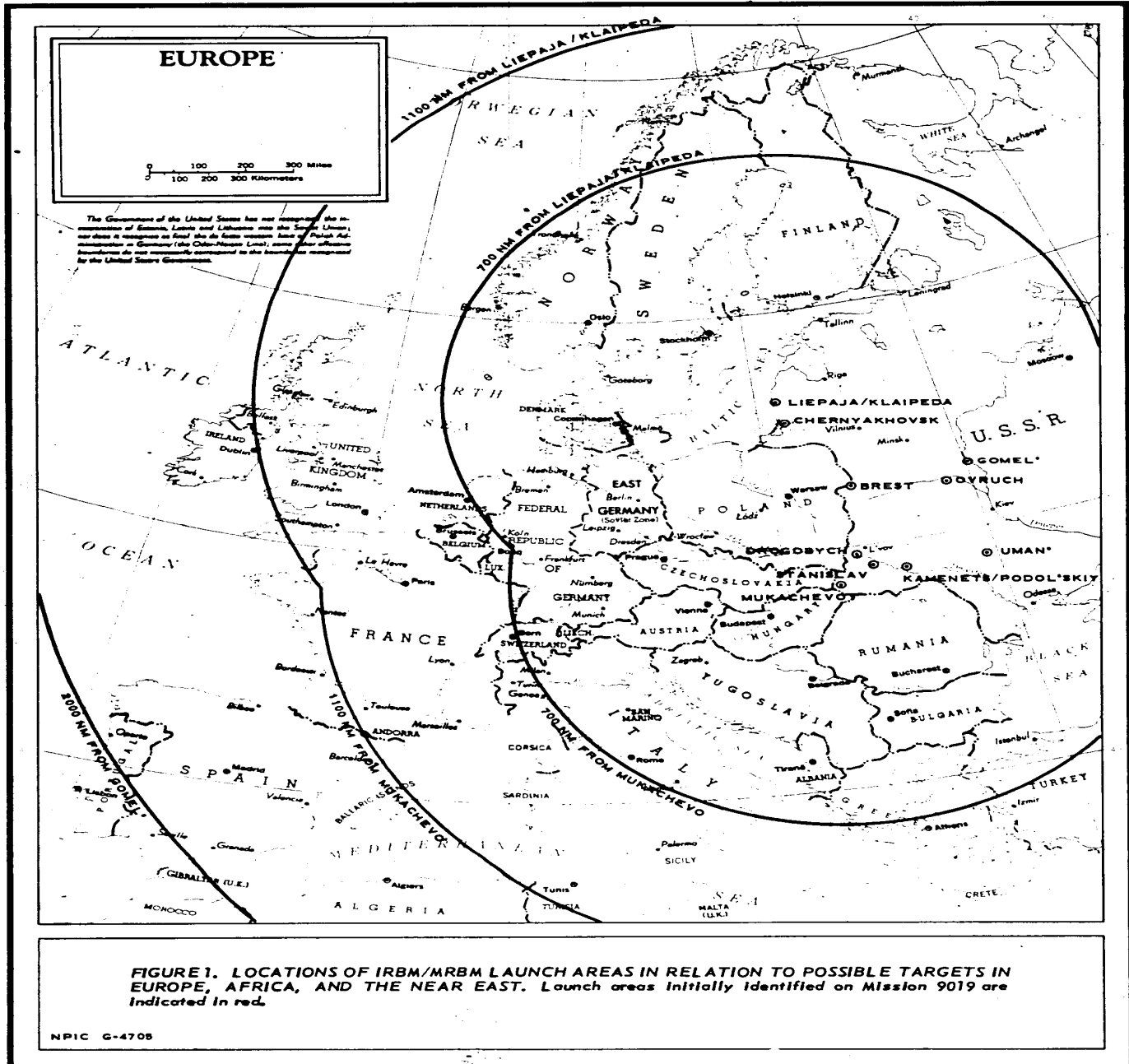
The scale of this photography and the amount of halation around the items of interest dealt with in this report make measurements presented herein inaccurate in varying, unpredictable amounts. All mile distances given are in nautical miles.

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SUMMARY

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[] has revealed nine previously unreported Soviet IRBM/MRBM launch areas along the western perimeter of the USSR. These installations, combined with the 25 launch areas (19 firm, 4 probable, and 2 possible) identified on [] give a total of 34 IRBM/MRBM launch areas located in the USSR.

Each of the newly identified launch areas has four launch pads and associated support facilities. All except one of the areas are deployed in pairs. The two launch areas comprising each pair are separated by a distance of not more than 8 miles. The single launch area was found in an area generally obscured by heavy clouds, making a complete search for other facilities impossible.

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The nine installations are dispersed over an area extending from the Baltic Sea southeastward to the Carpathian Mountains. The confirmed launch areas identified on [] are in the general vicinity of the cities of Liepaja and Klaipeda (four launch areas), Drogobych (two launch areas), Mukachevo (two launch areas), and Brest (one launch area). There is no photographic evidence that these cities are specifically involved in IRBM/MRBM deployment or directly associated with the launch areas.

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On the photography from [] covering this whole area, weather conditions ranging from scattered clouds to widespread overcast prevented examination of most of the previously reported launch areas and of many areas made missile-suspect by collateral reports.

INTRODUCTION

This report presents a detailed photographic analysis of nine IRBM/MRBM launch areas in the USSR identified from photography of Mission [] The launch areas have been divided into four groups based on lo-

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cation, and are referenced only for convenience to the largest city in the vicinity. It is not implied that these cities are involved in IRBM/MRBM deployment or specifically associated with the launch areas identified.

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All the launch areas are road-served only and are located in dense, coniferous forests. As at launch areas previously identified, security precautions are generally not evident, although fencing is probably present.

These launch areas are generally similar in configuration to those identified on [redacted]. However, it should be noted that reference to any of the identified IRBM/MRBM launch areas as "Inline," "Dumbbell," or "Rectangular" type installations merely indicates the relationship between pads within an individual launch area and not the service system and flow pattern. Several of the areas have variations in layout which cannot at this time be stereotyped. Where possible the type will be assigned; in other instances it may be necessary merely to describe in detail and show an area by means of a photograph or line drawing.

Figure 1 depicts the location of all identified IRBM/MRBM launch areas in relation to possible targets in Europe, Africa, and the Near East, including those identified on [redacted] 1/ Table 1, at the end of this report, is a tabulation of all identified IRBM/MRBM launch areas.

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LIEPAJA/KLAIPEDA AREA

Four IRBM/MRBM launch areas with a total of 16 launch pads have been located inland from the Baltic port cities of Liepaja and Klaipeda (Figure 2). Two of the areas are designated Inline types while the other two have not been assigned a designation. Rail lines are located near these launch areas but a firm candidate for a rail-to-road transfer point has not been located. Two surface-to-air missile (SAM) sites, one of which has been identified as a probable SA-3 system launch point, have been located in this area near Palanga. 2/

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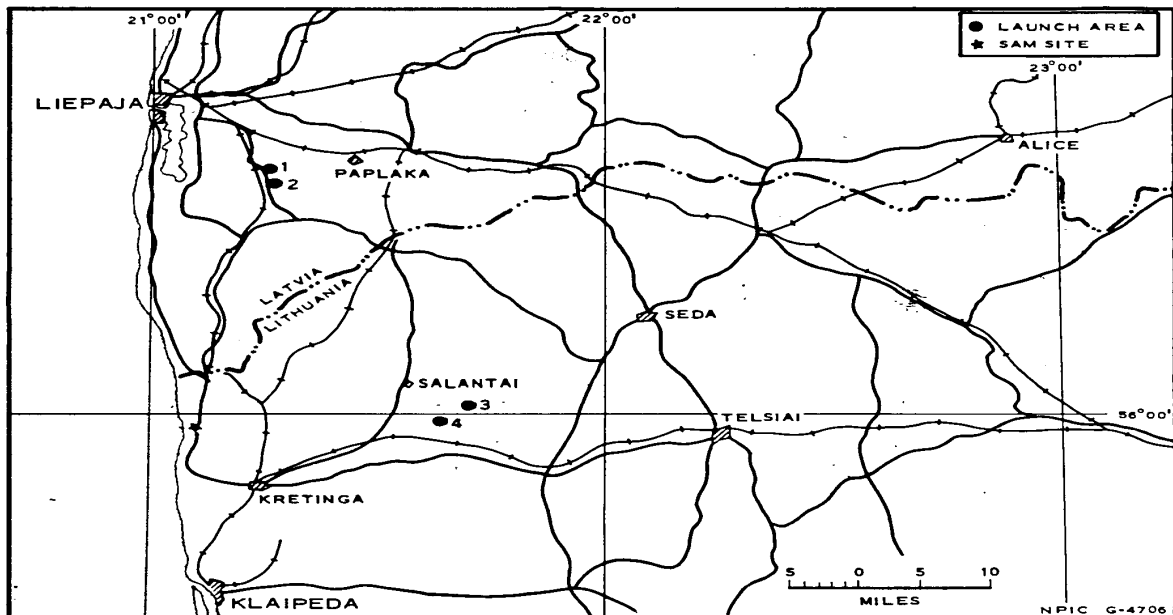


FIGURE 2. MISSILE ACTIVITY IN THE LIEPAJA/KLAIPEDA AREA.

Inline Launch Area, 56-24-40N 21-16-00E (Item 1, Figure 2; Figure 3). An Inline-type IRBM/MRBM launch area is located 10 miles south-east of Liepaja, 6.5 miles west-southwest of Paplaka.

The road pattern servicing the launch points at this facility is different from that observed at other Inline-type IRBM/MRBM launch areas. However, the alignment of the four launch points in a north/south line indicates that this area should be designated an Inline-type facility. Two drive-through buildings are located near the pads.

The launch pads are grouped in pairs 680 feet apart; the pads in each pair are separated by a distance of 535 feet. Parallel north/south roads are located on both sides of the launch pads diagonally off which a service road leads to each launch point. A small support area with at least seven

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small buildings is located immediately to the east of the pads. No security is evident at this facility.

Inline Launch Area, 56-22-50N 21-16-00E (Item 2, Figure 2). Another generally similar Inline-type IRBM/MRBM launch area which is partially obscured by cloud and cloud shadow is located 11 miles southeast of Liepaja and approximately 2 miles south of the launch area described above. The four launch pads are in a north/south line and the support area is located just to the east. The quality of the photography at this point is such that individual buildings cannot be identified.

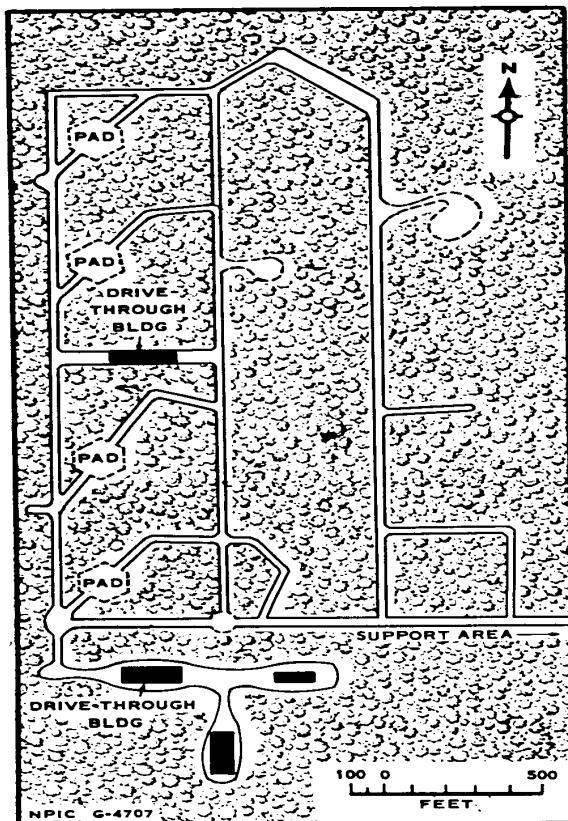


FIGURE 3. INLINE LAUNCH AREA 10 MILES SOUTH-EAST OF LIEPAJA.



FIGURE 4. LAUNCH AREA 26 MILES NORTH-EAST OF KLAIPEDA.

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Launch Area, 56-02-00N 21-42-00E (Item 3, Figure 2; Figure 4). An IRBM/MRBM launch area of an irregular type is located in a forest 26 miles northeast of Klaipeda and 4.5 miles east-southeast of Salantai. The four launch points at this facility are grouped in pairs approximately 1,000 feet apart. The pads of each pair are in a northwest/southeast line and are served by wide-radius-turn road systems. The pads in one pair are approximately 400 feet apart while those in the other pair have a separation of approximately 800 feet. Each pair of launch points has a drive-through building associated with it.

Immediately to the southeast of the pads is a support area consisting of at least 10 buildings. A road pattern in the forest, approximately three-quarters of a mile south of the launch support area, probably indicates the location of additional support facilities.

Launch Area, 55-59-30N 21-39-10E (Item 4, Figure 2; Figure 5). An IRBM/MRBM launch area of an irregular type is located 4 miles southwest of the launch area described above, 5 miles south-southeast of Salantai, and 24 miles northeast of Klaipeda. The four launch pads at this facility are grouped in two pairs; the pads of each pair are aligned north-

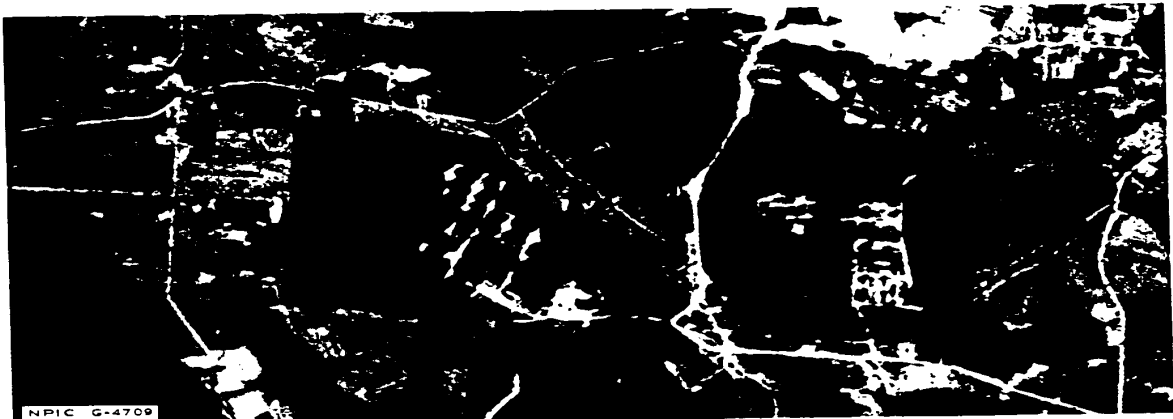


FIGURE 5. LAUNCH AREA 24 MILES NORTHEAST OF KLAIPEDA.

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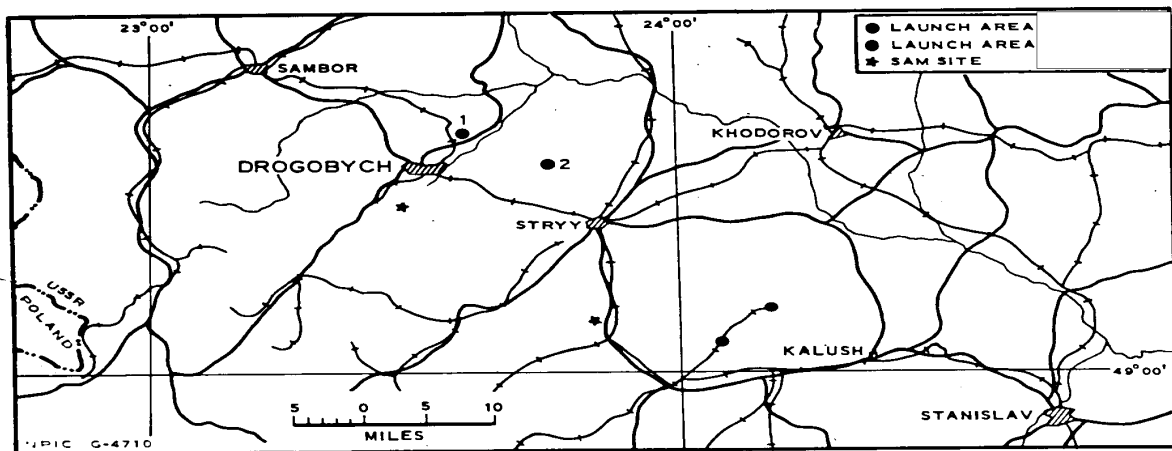
west/southeast, but the pairs of pads are offset from a straight northwest/southeast line by a distance of 400 feet. The pads in each pair are approximately 500 feet apart. A drive-through building is associated with each pair of launch points. A support area consisting of at least six buildings is located immediately to the south. Another support area with at least nine buildings and served by a network of wide-radius-turn roads is located approximately one mile to the southeast of the pads. The smallness of the surrounding forest may account for the area's unique configuration.

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DROGOBYCH AREA

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Two Dumbbell-type IRBM/MRBM launch areas have been identified near Drogobych (Figure 6). These facilities are located in forests and have support areas associated with them. Two IRBM/MRBM launch areas that were identified on [redacted] (listed in Table 1 as in the vicinity of Stanislaw) are located 30 miles to the southeast, between Stryy and Kalush. These areas were cloud-covered on [redacted] and could not



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FIGURE 6. MISSILE ACTIVITY IN THE DROGOBYCH AREA.

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be re-examined. Two SAM sites have been identified in this general area.

Dumbbell Launch Area, 49-25-00N 23-34-30E (Item 1, Figure 6; Figure 7). A Dumbbell-type launch area is located 4.5 miles northeast of DrogoBYch near the village of Vatsovitse. The four pads of the launch area form a parallelogram, measuring approximately 300 by 950 feet. Each of the two pairs of pads has a drive-through building and a network of wide-radius-turn roads. A small support area is immediately south of the launch points and contains at least five small buildings. No security is evident on the photography. The DrogoBYch/Sambor rail line passes

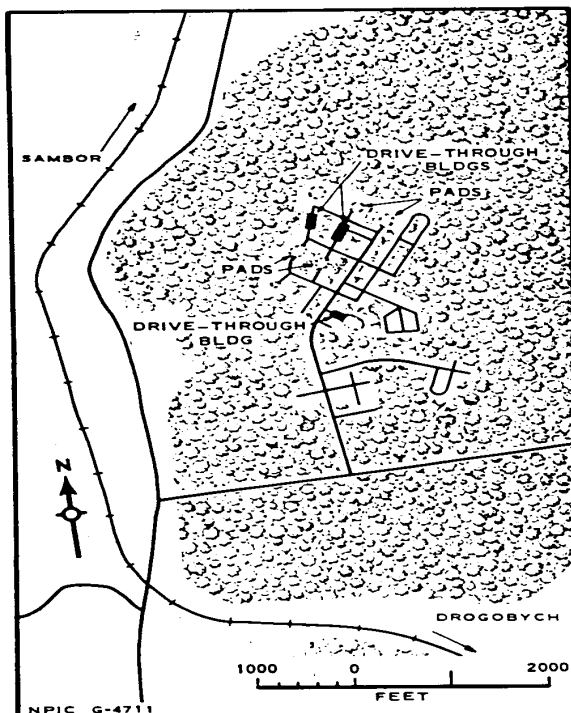


FIGURE 7. DUMBBELL LAUNCH AREA 4.5 MILES NORTHEAST OF DROGOBYCH.

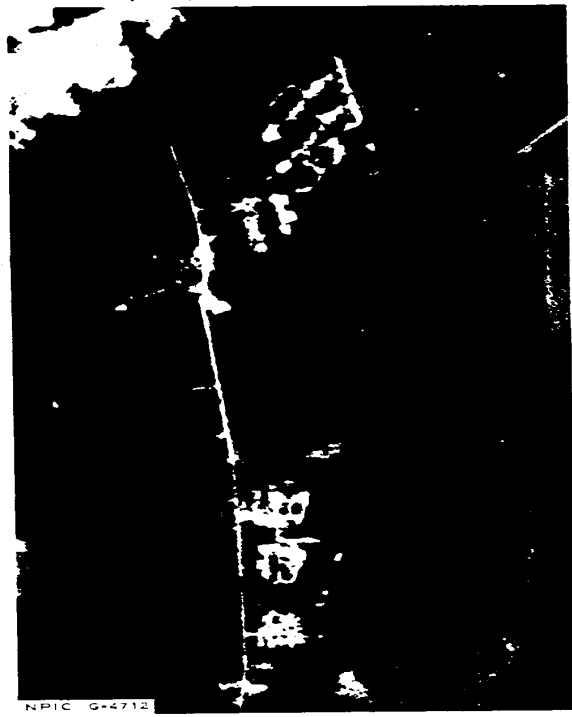


FIGURE 8. DUMBBELL LAUNCH AREA 10 MILES EAST OF DROGOBYCH.

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just to the west of this launch area, but the heavy forest would prohibit any ground observation of the facility.

Dumbbell Launch Area, 49-22-30N 23-45-00E (Item 2, Figure 6; Figure 8). A Dumbbell-type IRBM/MRBM launch area is located 10 miles east of Drogobych near the village of Monastyr'-Letnyanskiy. This facility is positioned in a forest 7.5 miles southeast of the launch area described in the preceding paragraph. The launch points form a parallelogram, measuring approximately 500 by 950 feet. Two parallel roads service the pad areas. There is a possible drive-through building located on each of the parallel roads. A support area, which has a network of wide-radius-turn roads, is located approximately a mile to the south of the launch points. No buildings in this area can be identified on the photography, but there are a number of clearings in the forest which probably have buildings.

MUKACHEVO AREA

Southwest of Mukachevo near the village of Gat', and near the Hungarian border, two Rectangular-type IRBM/MRBM launch areas under construction have been identified (Figure 9). These launch areas and two other facilities possibly missile-related are located within a triangle formed by the rails and road connecting Mukachevo, Beregovo, and Uzlovoye. Also located in the Mukachevo area are a SAM site at 48-18N 22-24E and a LOX transfer point at Kolchino. 3/

Rectangular Launch Area, 48-18-30N 22-30-30E (Item 1, Figure 9; Figure 10). A Rectangular-type launch area is under construction in the forest 12 miles southwest of Mukachevo and near the village of Rafaynovo. The four clearings for pads have been made in the forest and form a rectangle, measuring approximately 500 by 1,100 feet. No definite drive-through buildings or support area can be identified, although the road

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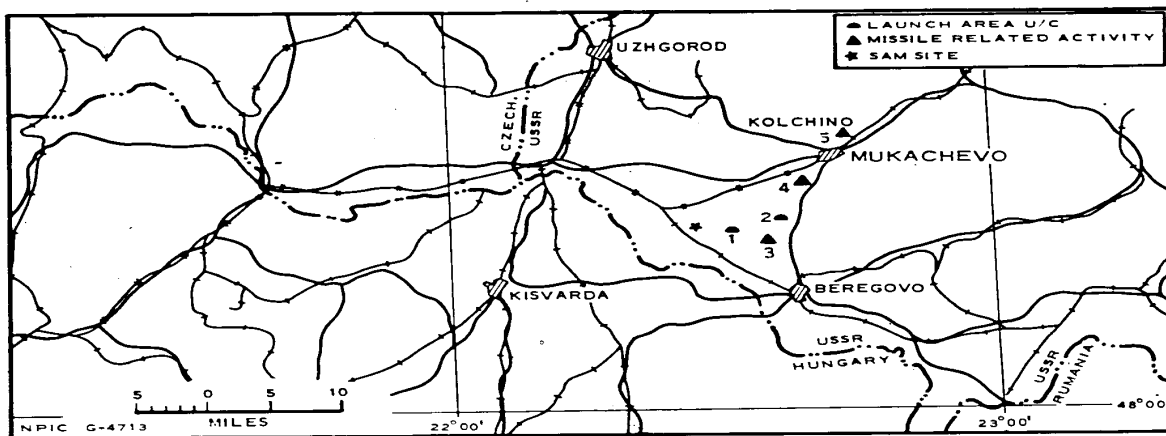


FIGURE 9. MISSILE ACTIVITY IN THE MUKACHEVO AREA.

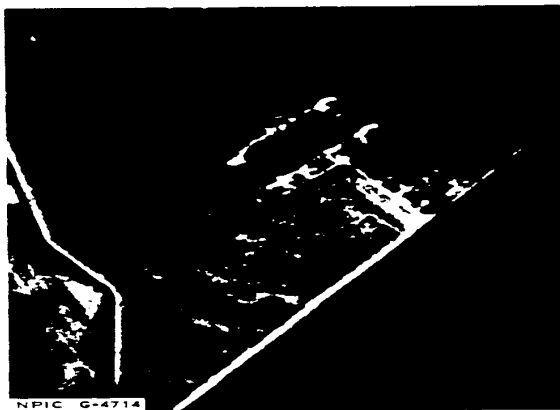


FIGURE 10. RECTANGULAR LAUNCH AREA U/C 12 MILES SOUTHWEST OF MUKACHEVO.



FIGURE 11. RECTANGULAR LAUNCH AREA U/C 8 MILES SOUTH-SOUTHWEST OF MUKACHEVO.

pattern in the forest indicates where they will probably be located. No security fences are evident at this facility.

Rectangular Launch Area, 48-19-30N 22-37-30E (Item 2, Figure 9; Figure 11). A Rectangular-type launch area is under construction 8 miles

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south-southwest of Mukachevo and just west of the village of Gat'. This facility appears to be in an earlier stage of construction than the one located 5 miles west-southwest which was described in the preceding paragraph. Measurements of this road-served installation are similar to those of other Rectangular-type IRBM/MRBM launch areas.

Missile Support Area

A missile support area (Item 3, Figure 9) is under construction at 48-17-00N 22-33-00E in a forest near the village of Malaya Began, 11 miles south-southwest of Mukachevo. A road pattern with wide-radius turns is evident, but no buildings are apparent. The facility, which appears to be in the early stages of construction, is located within a few miles of the Rectangular-Type IRBM/MRBM launch areas identified in this vicinity.

Possible Missile-Associated Activity

An area of scarring in the forest, 3 miles southwest of Mukachevo at 48-24-30N 22-41-15E, may be some type of missile-associated activity in early stages of construction (Item 4, Figure 9). The facility is road served, but no definite road pattern can be determined.

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Missile-Related Activity Near Kolchino

LOX cars have been observed on eight occasions and photographed from the ground in 1960 on a rail spur at 48-29N 22-46E near Kolchino, 3 miles east of Mukachevo (Item 5, Figure 9). 3/ This facility was covered by [] but is in deep cloud shadow. The rail spur can be identified, but a detailed description of the area cannot be made from this photography.

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BREST AREA

Inline Launch Area, 52-33N 24-07E (Figures 12 and 13). An Inline-type IRBM/MRBM launch area has been identified 32 miles north-north-east of Brest in a forest near the village of Myl'niski and close to the Soviet-Polish border. This launch area appears on photography in an area generally covered by heavy clouds. This condition and the fact that the area is positioned near the edge of the photographic frame preclude a thorough search of the area for additional missile-related facilities.

The four pads are aligned approximately 550 feet apart in a north-west/southeast line with a series of interconnecting roads. A small support area, containing at least seven buildings, is immediately south of the launch area and along the access road serving the facility. No drive-through buildings are discernible, but such buildings could be present in the cleared areas in the forest.

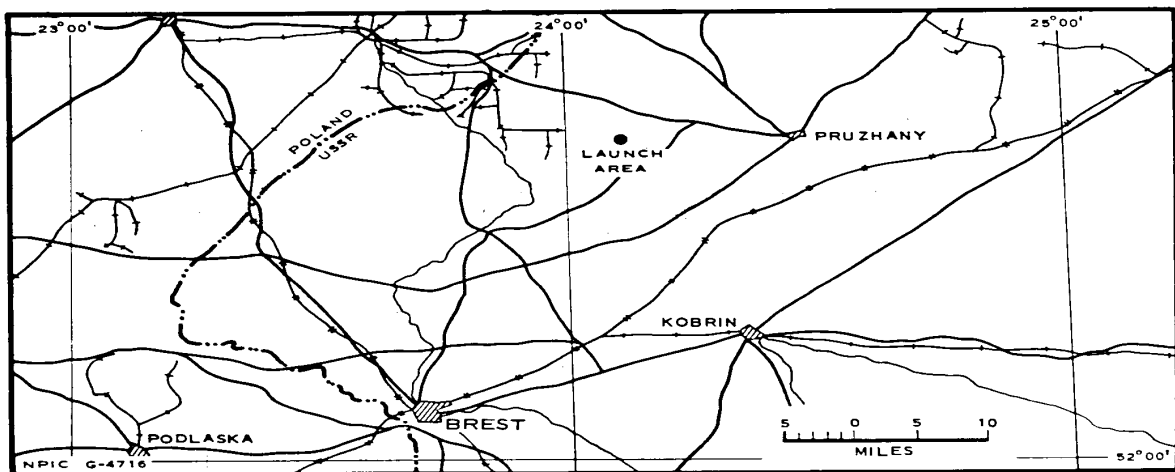


FIGURE 12. MISSILE ACTIVITY IN THE BREST AREA.

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FIGURE 13. INLINE LAUNCH AREA 32 MILES NORTH-NORTHEAST OF BREST.

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CONCLUSIONS

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1. Nine deployed, fixed, IRBM/MRBM launch areas with a total of 36 launch pads have been identified in the European USSR on [REDACTED]. These are in addition to the 19 launch areas with 76 launch pads, 4 probable launch areas with 16 pads, and 2 possible launch areas with 12 pads which were identified on [REDACTED] making a total of 140 pads with 34 firm, probable, and possible launch areas.

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2. The newly identified IRBM/MRBM launch areas are similar to those identified on [REDACTED] 1/

3. As with those identified on [REDACTED] there is no photographic evidence that the launch areas described in this report are intended to have an ICBM capability.

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Table 1. Data on Confirmed, Probable, and Possible IRBM/MRBM Launch Areas, European USSR.

Location		Type	Construction Status	Mission
Distance and Direction From Reference City	Coordinates			
Liepaja				
- 10 miles SE	56-24-40N 21-16-00E	Inline	Completed	
- 11 miles SE	56-22-50N 21-16-00E	Inline	Completed	
Klaipeda				
- 27 miles NE	56-02-00N 21-42-00E	Irregular	Completed	
- 24 miles NE	55-59-30N 21-39-10E	Irregular	Completed	
Chernyakhovsk				
22 miles NNW	54-58-30N 21-28-50E	Inline	Completed	
24 miles NNW	54-58-30N 21-36-30E	Inline	Completed	
9 miles NE	54-43-30N 22-04-50E	Inline	Completed or in late stage	
9 miles NE*	54-41-00N 22-04-50E	Probable Inline	Probable U/C	
22 miles WSW	54-32-50N 21-12-00E	Inline	Poss mid-stage	
21 miles WSW*	54-35-40N 21-12-00E	Probable Inline	Undetermined	
29 miles NE**	55-00-50N 22-21-30E	Irregular	Undetermined	
25 miles WNW**	54-45-05N 21-09-00E	Irregular	Completed	
Brest				
32 miles NNE	52-33N 24-07E	Inline	Completed	
Gomel'				
10 miles W	52-24-45N 30-39-45E	Inline	U/C	
10 miles SW	52-18-45N 30-42-15E	Inline	U/C	
Ovruch				
33 miles WSW	51-08-50N 28-00-30E	Rectangular	Completed	
30 miles WSW	51-10-00N 28-03-00E	Rectangular	Completed	
20 miles W	51-16-50N 28-15-00E	Rectangular	Completed	
29 miles NE	51-43-55N 29-12-30E	Rectangular	U/C	
27 miles NE	51-42-00N 29-12-50E	Rectangular	Completed or in late stage	
34 miles SSW	50-52-10N 28-18-30E	Inline	Completed or in late stage	
Uman'				
13.5 miles NE	48-53-40N 30-27-45E	Dumbbell	U/C	
49 miles SE	48-02-30N 29-33-30E	Inline	Completed	
Kamenets-Podol'skiy				
20.5 miles NW	48-51-30N 26-08-30E	Dumbbell	Completed	
24 miles NW	48-53-00N 26-03-30E	Dumbbell	Completed	
12 miles NE	48-51-10N 26-43-00E	Inline	U/C	
Stanislav				
18 miles S	48-38-45N 24-43-30E	Dumbbell	U/C	
16 miles S	48-40-00N 24-48-30E	Dumbbell	Completed	
26 miles NW*	49-06-00N 24-08-00E	Probable modified Dumbbell	Completed	
27 miles NW*	49-04-00N 24-04-30E	Probable modified Dumbbell	Completed	
Drogobych				
4.5 miles NE	49-25-00N 23-34-30E	Dumbbell	Completed	
10 miles E	49-22-30N 23-45-00E	Dumbbell	Completed	
Mukachevo				
12 miles SW	48-18-30N 22-30-30E	Rectangular	U/C	
8 miles SSW	48-19-30N 22-37-30E	Rectangular	U/C	
* Probable launch area ** Possible launch area				

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REFERENCES

PHOTOGRAPHY

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MAPS AND CHARTS

- ACIC. Operational Navigation Chart 152, May 59, scale 1:1,000,000 (U)
ACIC. Operational Navigation Chart E-3, 2d ed, 24 Sep 59, scale 1:1,000,000 (U)
AMS. Series M 508, Sheet R 56, 2d ed, Mar 56, scale 1:250,000 (U)
AMS. Series N 501, Sheet NM 34-9, 1st ed, Aug 57, scale 1:250,000 (U)
AMS. Series N 501, Sheet NN 34-12, 4th ed, Nov 57, scale 1:250,000 (U)
AMS. Series N 501, Sheet NN 35-10, 4th ed, May 58, scale 1:250,000 (U)
AMS. Series N 501, Sheet NO 34-11, 4th ed, Nov 59, scale 1:250,000 (U)

DOCUMENTS

1. NPIC. R-3/61, IRBM/MRBM Launch Areas in the European USSR, Jul 61 (TSR)

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3. CIA. PIC/JB-18/61, Probable Missile-Related Activity in Carpathian Military District, USSR, Mar 61 (TSR)

REQUIREMENTS

- CIA. DDI/RR/E/R-27/61 (TSR)
Air. AFIC-10/61, AFIC-11/61, and AFIC-14/61 (TSR)

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